English	Scientific	Katatjara	Mantjjiltjara	
	Eucalyptus cam- aldulensis	Wurangka	Walytji	
	Eucalyptus spp.	Klta-klta		
	_		Pana-pana	
	Eremophlia sp.	Nyinpingka		
	*Solanum lasio- phyllum	·	Kuran-kuran	
	(frult skln)			
	*S. quadrllocatu- lum (frult skln)		Pilytjiwin	
	*Solanum spp. (fruit skln)	I	Kuntunga : pala	
	Triodla irritans	Paru	Mankalpa	
	*Hakea lorea (nectar)		Wamula	
	*Marsdenla australis	:	Kalkula	
	(green seeds)			
	*Cynanchum floribundum	·	Wanyan	
	(green seeds) *Calestegla		Mata	
	seplum (tuber)		Mata	
	*Plectronla lati- folia (berry)		Nganungu	
	*Flcus puberula (ripe fruit)		Kunaw]nka	
	*Loranthus spp. (rlpe frult)		Milliyu	
Sturt Pea	Cllanthus speci- osus		Malukuru -	
	Santalum splc- atum		Tartja	
Blackboy	Xanthorrhoea sp.		Nyuntullri	

# NOTES ON SOME WADERS IN SOUTH-WESTERN AUSTRALIA

By C. F. H. JENKINS, M.A.

The Swan River Estuary and the numerous adjacent swamps have provided an ideal habitat for migratory waders and resident water birds for a very long time. In more recent years, however, rapid changes have taken place in the metropolitan area involving the reclamation of river foreshores and the "improvement" or filling of numerous swamps. Already Perth Water is almost completely enclosed by a stone wall, and the same applies to the north side of Melville Water from the Narrows Bridge to Nedlands.

It was with great interest and coneern, therefore, that local naturalists watched bulldozers and dredges go into action along the river frontage at Como and South Perth in preparation for the Kwinana Freeway. Eucalypts, paper barks and rush flats were sacrificed in the cause of progress, and a once attractive shore line was reduced to a sandy waste. Fortunately, however, no retaining wall was erected in this part of the river and shelving beaches and broad shallows still provide ideal feeding grounds for water birds of

all kinds. The formal plantings along the Freeway have of course completely supplanted the more picturesque native trees but fortunately rushes and other swamp plants are once again appearing near the water line and at least some natural cover may soon be restored.

Another favourable observation is that the birds are completely indifferent to the speeding traffic and contrary to earlier expectation visit the area in undiminished numbers. This fact can be put to good use in the development of other foreshore areas where scenic roads and swamp reclamation are considered essential. Where possible, such work should provide for a new beach line as at Como and South Perth, and not the type of stone retaining wall which has driven almost every bird from Perth Water and converted the area into little more than an oversized concrete basin. Some of the more picturesque stretches of the river foreshore should be preserved entirely in their natural state, but unless very prompt action is taken future generations will have no idea of the natural flora and fauna which once skirted the river's edge.

The most important area to be preserved is Pelican Point, for this region is not only first favourite with numerous water birds, but its proximity to the University makes it unique as a bird banding station and research centre. The rapid development projected for Perth in the next decade must lead to further clearing and land improvement, with its consequent destruction of wild life. The impact can be cushioned, however, by an understanding approach to the problem, and with some collaboration between planning authorities and wild life conservationists, a compromise could be reached which would preserve at least some of the natural foreshore for many years to come.

With the recent establishment of a bird banding station at Pelican Point our knowledge of the local waders should increase rapidly. Observers in the South-West are still relatively few, however, and the following notes may be useful in supplying distribution data concerning some of the lesser known species.

## Turnstone (Arenaria interpres)

As recorded by Serventy and Whittell (1951) this bird is rather scarce on the southern mainland beaches. I have only seen one specimen on the mainland and this was near the mouth of the estuary at Mandurah in October, 1959.

## Hooded Dotterel (Charadrius cucullatus)

The local distribution of this bird was defined by Serventy and Whittell (1951) as south of line from Geraldton, Wongan Hills, Lake Cowan and Balladonia. The northern limit was extended by Ford and Teague (1959) from Geraldton to Port Gregory. The north-eastern limit was also extended when I saw a pair of birds near the south end of Lake Deborah (north-west of Bullfinch) in September, 1959.

#### White-headed Stilt (Himantopus himantopus)

Serventy and Whittell (1951) record that this bird is "sparingly distributed in the South-West corner"; and "may be found as far south as Busselton." Several birds were seen near the mouth of Denmark River in May, 1955, and about thirty were seen at the same locality in May, 1956. A party of about twenty were seen at Hutt Lagoon, Port Gregory, in May, 1959.

#### Banded Stilt (Cladorhynchus leucocephalus)

The furthest north I have seen this species is Hutt Lagoon, Port Gregory, where about twenty mature plumaged birds were seen in May, 1959. About 150 immature birds were seen near the mouth of the Denmark River in May, 1956. They were in eompany with White-headed Stilts and Avoeets.

#### Avocet (Recurvirostra novae-hollandiae)

This species is often very numerous on the Swan estuary during the summer. During dredging operations along the South Perth foreshore in 1954 some 300-400 birds were present during the tate summer. The largest single group seen was in October, 1957, when 500 birds were present in the same locality. I have seen the birds as far north as Hutt Lagoon, and on the south coast near the mouth of the Denmark River. From 70 to 80 birds were seen in this area in May, 1956, and about 20 in May, 1958.

## Eastern Curlew (Numenius madagascariensis)

These birds can often be seen during the summer on the estuaries at Bunbury and Mandurah. One was seen at Mandurah as late as August in 1959. A single bird was seen on South Perth foreshore in December 1959.

#### Black-tailed Godwit (Limosa limosa)

Small parties of this bird have been seen at Bunbury (February, 1956), at Pelican Point on several oceasions and at South Perth foreshore (November 1956).

### Bar-tailed Godwit (Limosa lapponica)

A small party was seen at Pelican Point in November 1956, a single bird was seen on South Perth foreshore in November 1957 and a single bird with one leg was seen at Mandurah in August 1959.

## Wood Sandpiper (Tringa glareola)

A specimen of this bird was seen near Lake Gnangara (Wanneroo) in February 1958.

## Grey-tailed Tattler (Tringa brevipes)

This bird is a rare visitor to the South-West, but it has been sighted on several occasions on the Swan River estuary (Jenkins, 1956).

#### Australian Pratincole (Stiltia isabella)

The pratineole has only recently been recorded from Western Australia, south of the Kimberley. Serventy (1956) saw the birds at Koonalda approximately 60 miles east of the State border and sugested its probable occurrence further to the West. J. R. Ford (1960) later saw it near Rocbourne. My brother, L. H. C. Jenkins observed pratincoles at Mileura Station near Meekatharra in June and July, 1947. The birds were noted on bare plain country and their characteristic swallow-like form and flight were clearly seen. Unfortunately the significance of the observation was not realised at the time and speeimens were not procured. In view of the recent sightings, however, this record is worth reporting, if for no other purpose than to alert other observers.

#### REFERENCES

FORD, J. 1960. The Australian Pratincole in the North-West.  $W.A.\ Nat.,\ 7:\ 167.$  FORD, J. R. and B. V. TEAGUE. 1959. Observations between the

Moore and the Murehison Rivers, Western Australia. 59: 89.

JENKINS, C. F. H. 1957. Grey-tailed Tattler on the Swan River Estuary. W.A. Nat., 6: 55. SERVENTY, D L. and H. M. WHITTELL. 1951. Birds of Western Australia, 2nd edn. Perth. SERVENTY, V. N. 1956. The Australian Pratineole near the West-ern Australian border. W.A. Nat., 6: 152

## IRRUPTION OF THE WHITE-WINGED BLACK TERN INTO THE SOUTH-WEST, 1960

By JULIAN FORD, Attadale.

The White-winged Black Tern (Chlidonias leucoptera) is a Palaearetie breeding species which during the northern winter moves into the tropical belt of the Ethiopian, Oriental and Australasian regions. Recent observations indicate that the species is not uncommon in coastal northern Australia during this period; L. Amiet (The Emu, 56, 1956: 95; 57, 1957: 55) and F. M. Hamilton (The Emu, 57, 1957: 147) observed the species in fairly large numbers along the Queensland eoast, and D. L. Serventy (W.A. Naturalist, 1, 1947: 68) and P. Slater (W.A. Naturalist, 7, 1959: 39) reeorded it in northern Western Australia, Oeeasionally as the result of eyclonic phenomena, the species is transported many hundreds of miles further south. Three such invasions into the South-West have been reported, viz. in 1917 (W. B. Alexander, The Emu, 17, 1917: 95), 1918 (W. B. Alexander, The Emu, 18, 1918: 134) and in 1956 (A. M. Douglas et al., W.A. Naturalist, 5, 1956: 121). A further irruption into the South-West is now reported.

On about March 20, 1960, a tropical eyelone developed near Cape York, Queensland, and then moved westwards across the Gulf of Carpentaria and the Northern Territory, and intensified off the Kimberley and North-West coasts from March 23 to 25. It then travelled rapidly southwards along the west eoast and passed the